

Module 1 - Lecture 12

# Polymorphism



# Review

- What is an example of inheritance?
- What is a superclass or base class?
- What is a subclass?

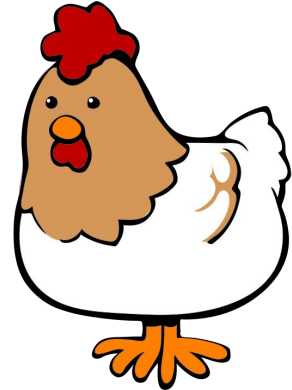
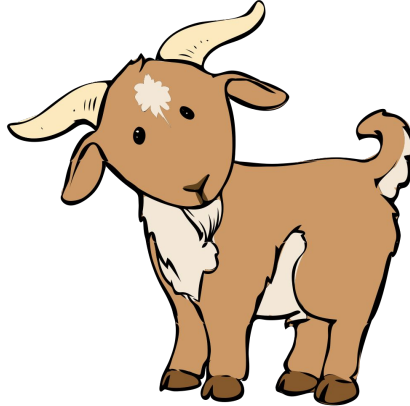
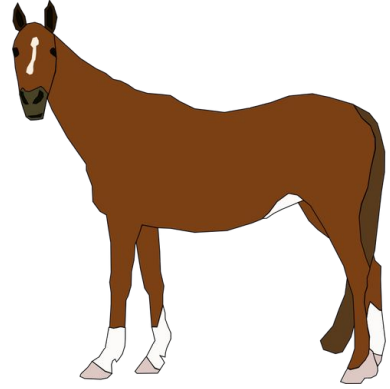
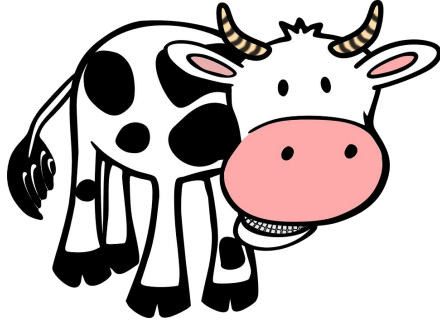


# Polymorphism

- “**Poly**” - many
- “**Morph**” - change or shape
- In Object-Oriented programming, **polymorphism** is the idea that something can be assigned a different meaning or usage based on context. This specifically allows objects to take on more than one form.



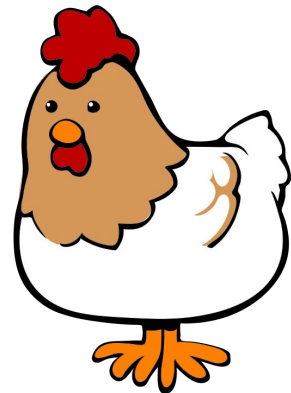
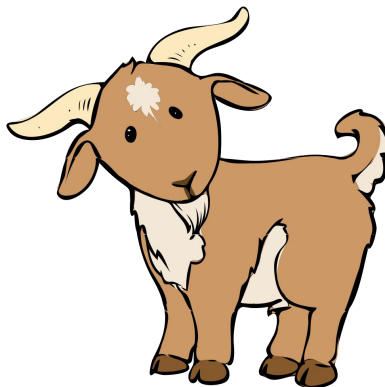
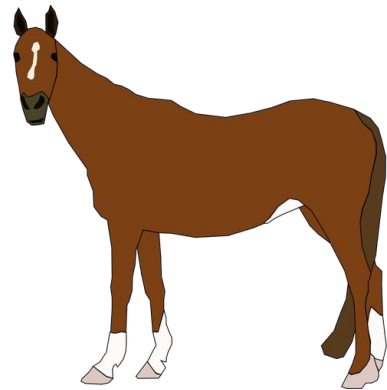
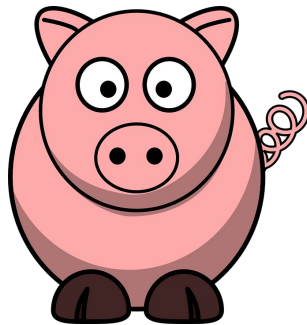
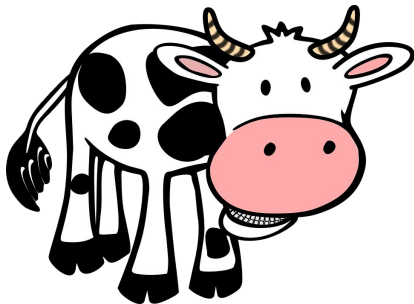
# Polymorphism through Inheritance



# Let's Code!

# Polymorphism through Interfaces





# Interface

- Defines **what something can do** or **how it can be used**, but **not how it does it**.
- An **interface** is a contract that defines what methods a user of the interface can expect.
- An interface cannot be instantiated.
- Multiple interfaces are allowed for a single class.
- If class A implements interface B, then A is a B, and so are all of its children.





# Let's Code!

# Reading

- Module 1
  - Inheritance



QUESTIONS?

